BEAR RIVER - WAPITI
LOCAL
INTEGRATED RESOURCE PLAN

Approved by the Minister of Forestry, Lands and Wildlife
on December 1, 1986

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PREFACE

This planning document was prepared by government agencies in recognition of the need for improved management of Alberta's lands and resources. It applies only to public lands within the Bear River-Wapiti planning area, and not to any private lands.

The plan presents the Government of Alberta's resource management policy for the public lands and resources within the area. It is intended to be a guide to resource managers, industry and publics having responsibility or interests in the area rather than a regulatory mechanism. Resource potentials and opportunities for development are identified with a view to assisting the economic progress of Alberta. The plan is sufficiently flexible so all future proposals for land use and development may be considered. No legitimate proposals will be categorically rejected. The provincial government is committed to serving Albertans; should a proposal not be in keeping with the provisions of the plan, every means will be taken to explore alternative means for accommodating the proposal in a more appropriate location, either in this planning area or on other public lands. The rejection of any proposals will only be done in writing by the Minister or the Minister's designate.

A detailed outline for implementation will be provided for this local plan in order to identify the necessary implementation actions and roles. This implementation outline will also provide for the continuing review of the plan so it may accommodate changing needs and situations. Wherever possible, the private sector will be given the opportunity to be actively involved in the operational delivery of the plan.

Implementation will be subject to the normal budgetary approval process. Overall priorities will be established with consideration of opportunities in other planning areas and areas currently outside the planning process.

While the plan identifies resource potentials and opportunities, the realization of these may require the dedication of major amounts of public funds. The plan will be used on the understanding that any actions required for implementation will only be undertaken as budgetary approvals are given in the normal way. The private sector will be given the first opportunity to provide any development required.

This plan has no legal status and is subject to revisions or review at the discretion of the Minister of Forestry, Lands and Wildlife.

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1. INTRODUCTION

1.1 Definition of Draft Plan

A draft plan further details the policy direction identified in the resource management policy report. The draft plan includes:

- an identification of the resource management policy. This outlines the resource management emphasis for the planning area. Also outlined are the resource management objectives identifying the desirable condition for resource use. Guidelines addressing use and management of the resource are given, ensuring the objectives are achieved. Implications of the objectives and guidelines are also presented.
- a mapping of the division of the planning area into smaller land units, or sub-areas. The sub-areas locate within the planning area specific management intent, specific resource objectives and resource management guidelines.

1.2 Planning Background

The Bear River-Wapiti Local Integrated Resource Plan was initiated in May, 1983 in response to a joint request from the City and County of Grande Prairie. They saw a need to integrate a number of competing uses which had already severely disturbed portions of the fragile sand dune ecosystem covering much of the area. These uses are recreation, country residential, grazing by domestic animals, industrial development and resource exploration and extraction. The terms of reference was completed and endorsed by government in January, 1984. The resource management policy was completed and endorsed by government in July, 1985.

The team assembled to prepare the integrated resource plan for the Bear River-Wapiti planning area consists of a team coordinator from the Resource Evaluation and Planning Division of Alberta Forestry, Lands and Wildlife and four team members, one from each of the following agencies or local authorities: Fish and Wildlife Division, Public Lands Division (both divisions are within Alberta Forestry, Lands and Wildlife), the City of Grande Prairie and the County of Grande Prairie. These agencies and local authorities have a vital interest in the public land allocation and management decisions for the planning area.

In addition to these representatives, other agencies and groups have been invited to participate as consultants to the planning team. They include government departments, local authorities and provincial and local public interest groups. Members of the general public also act as consultants to the planning team.

1.3 Plan Area Description

The Bear River - Wapiti planning area is located immediately south and east of the City of Grande Prairie (Figure 1). Approximately 40 sections in size, it is bounded by the Resources Road on the west, and by the Bear and Wapiti Rivers on the north and south, respectively. The junction of these two rivers forms the eastern boundary of the planning area. The western boundary is immediately adjacent to the eastern boundary of the seven section Wapiti-Grande Prairie Sand Dunes Integrated Land Use Management Plan area (Alberta Energy and Natural Resources Report No. 78, July 1, 1978).

The planning area is composed of two major river valleys and ecologically fragile sand dunes intermixed with low wet bogs. Lodgepole pine stands, with an understory of blueberry and/or bearberry, dominate the dunes, while black spruce, tamarack, Labrador tea, sphagnum moss, dwarf birch and sedges are found on the poorly drained sites. Several shallow lakes are located in the interior of the planning area. Non-dune sandy plains occur along the southern perimeter and in the eastern-most portion of the area. Pine/bearberry or aspen/shrub plant communities are found here, the latter on thin soils and swales between sand knolls. Valley walls along the Wapiti and Bear Rivers are steep and therefore unstable and prone to erosion. There are also some gently sloping terraces along the Wapiti River where pine, black spruce and particularly aspen and willow occur.

Part of the planning area is privately owned. Approximately three-and-one-half sections of land are held by Procter and Gamble Cellulose Ltd. along the Wapiti River. Other private lands are located adjacent to the Resources Road and along the Bear River, the largest piece comprising the Aspen Ridge housing development.

Approximately two sections of land are held as grazing leases, the majority at the confluence of the Bear and Wapiti Rivers. Other resource uses for which leases have been granted are peat extraction adjacent to the Resources Road, and the fairgrounds complex nearby.

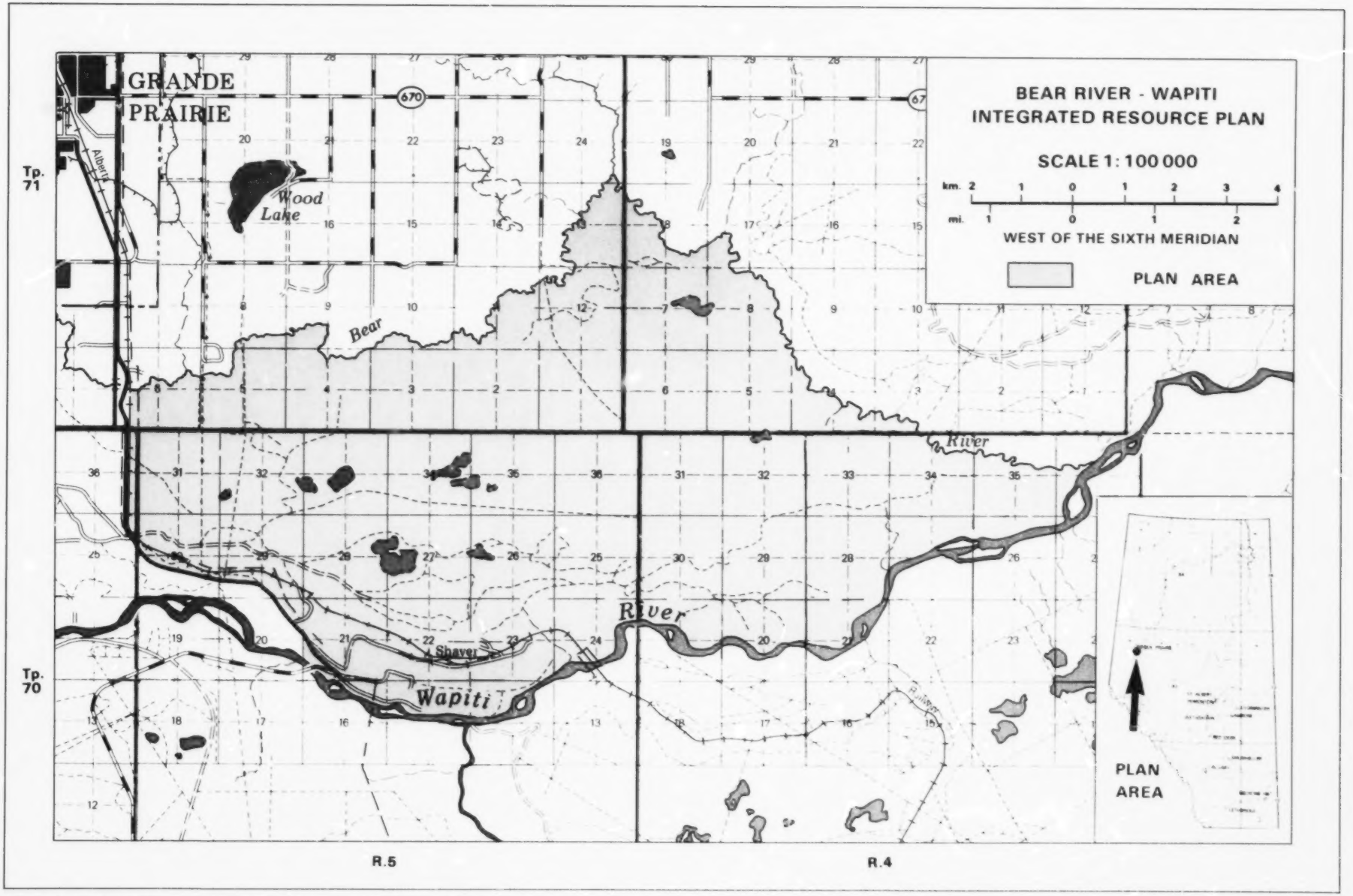

Figure 1 BEAR RIVER - WAPITI LOCAL INTEGRATED RESOURCE PLAN AREA

Subsurface leases for petroleum and natural gas are held on approximately 50 percent of the planning area by seven different companies.

A reservation was placed on approximately nine sections of land, both west and east of the Procter and Gamble plant site, to protect the interests of the Company. The purpose was to restrict the use of the land, enabling the Company to have:

1) a buffer protecting their property from vandals;
2) land available for future plant expansion; and
3) assurance that no other development would occur east and west of the plant site as the odour from the plant during a southwest or southeast wind would make this a highly undesirable venture.

Most of the area not under reservation for the benefit of Procter and Gamble is under reservation for a Recreation Natural Area. The eastern two- thirds of land in the proposed Recreation Natural Area does not permit developed access, while the western third may.

A great deal of disturbance to the land has occurred in the western portion of the planning area. Here, an intricate and extensive network of roads and trails (Figure 1) acts as a gathering place for recreationists and actually encourages further destruction of the sand dune complex, as many users are tempted to disturb the land adjacent to the existing trails or create new trails altogether. Many users further degrade the area by leaving their refuse behind.

Historically, the study area was part of the hinterland of early fur trade posts established between 1792 and 1813 on the upper Peace and Athabasca Rivers by the North West Company. Notable among these early posts are Fort Forks and the Fort Dunvegan on the Peace River and Jasper House on the Athabasca River. The original native fur hunters in this area were apparently Beaver Indians who were joined early in the nineteenth century by Iroquois hunters who married Cree women and whose offspring spoke Cree. In 1821 the North West Company and the Hudson's Bay Company amalgamated and the Hudson's Bay Company established Grande Prairie Post at or near Bear Lake to safeguard the trade in that area from free traders who were on the upper Peace River as early as 1864.

During the 1880s, Oblate missionaries from St. Charles Mission at Dunvegan (Fathers Grouard and Le Treste) began visiting Grande Prairie Post to meet the nomadic native inhabitants of the area whom they described as Beaver Indians and a number of Iroquois "Metis". The latter continued to trade at Jasper House until its closure around 1890.

Settlement of the Grande Prairie area immediately north of the study area began in earnest in 1910. The Edson Trail to Grande Prairie, which opened in 1911, skirted the study area five miles to the north. In 1916 the ED & BC Railway reached Grande Prairie from the north, but the study area appears to have remained a wilderness until the Alberta Resource Railway penetrated it en route to Grande Prairie in 1969.

The Grande Prairie region was occupied by Early Prehistoric big game hunters soon after the receding of the continental ice sheets 10 000 to 12 000 years ago. Fossil finds of late Pleistocene bison and elk, and collections of Palaeo-Indian projectile points occur throughout the region, although intact associations of these species with prehistoric artifacts of this period have yet to be located.

The major drainage systems of the Peace, Wapiti and Smoky Rivers supported an abundance and wide variety of fauna and flora throughout the prehistoric period and have been a prime foci of human settlement from the prehistoric period to the present day.

During the Middle Prehistoric period (c. 7 000 to 1 500 years ago), hunting and gathering bands continued to concentrate on big game hunting in this northern prairie-parkland environment. The sand dune areas of the Wapiti River likely provided an ecotone environment with access to both the water course and the upland prairie. The highly mobile nature of these peoples' life style is attested to by the wide variety of lithic materials that they used to manufacture their spear points, knives and other tools, from which inferences regarding trade and travel networks extending from western British Columbia to North Dakota is made.

During the Late Prehistoric period, approximately 1 500 to 200 years ago, people adopted the bow and arrow and the region was occupied by groups which in historic times were known as Beaver and Sekani Indians. The historic fur trade reached these people during the 17th and 18th centuries culminating in the establishment of Northwest Company and Hudson's Bay Company forts during the late 18th and early 19th centuries. It was during this period that Cree people of the northeastern boreal forest established themselves in the area, along with Metis people who were involved with the fur trade.

The Bear River - Wapiti planning area is considered to have high potential for the discovery of historical resource sites. The continually shifting nature of the Wapiti River sand dunes means that these areas should contain sites with several layers of occupation, which with careful study would yield significant information to aid in the unravelling of the details of human occupation in this region of Alberta.

The surficial deposits in the planning area are composed of glacial till and glaciolacustrine materials. The glaciolacustrine materials could contain vertebrate remains, but according to Hackbarth (1977), they are quite thin.

The bedrock formation in the area is the Wapiti Formation, which has yielded dinosaur remains. However, Hackbarth shows the surficial deposits as being thick - from 10 to 100 metres, with the Wapiti Formation coming to the surface only at the very base of the river valleys.

The area is considered to have potential for the discovery of palaeontological resources. In particular, developments such as gravel extraction operations or other land uses which may come in contact with bedrock exposures at the base of the river valley could result in the impact of palaeontological resources.

1.4 Broad Resource Policy Direction for the Planning Area

Since 1948, the province has been divided into White, Yellow and Green Areas. The basic purpose was to identify areas of existing settlement where public land with agricultural capability could be purchased (White Area), areas where public land with agricultural capability could be purchased under homesteading regulations (Yellow Area), and areas where public land would generally not be sold for cultivation (Green Area). In 1984, with the passage of amendments to the Public Lands Act, the Yellow Area no longer exists. Green Area public lands are managed to provide a variety of resources, notably timber, water, recreation, wildlife and fisheries on a sustained basis. Public land in the White Area is managed primarily for agriculture and other appropriate uses under the Public Lands Act.

The Bear River-Wapiti planning area falls entirely within the White Area.

The City of Grande Prairie and County of Grande Prairie No. 1 have completed a joint general municipal plan for lands surrounding the City of Grande Prairie, including the Bear River-Wapiti planning area. This joint general municipal plan neither controls the disposition of public lands nor public use of public lands. The Bear-River Wapiti Local Integrated Resource Plan will complement the joint general municipal plan.

1.5 Report Preparation

Team members and government consultative representatives contributed detailed resource management objectives, guidelines and implications for use in preparation of the draft plan for the Bear River-Wapiti planning area. The bases for the formulation of these detailed objectives and guidelines are the broader objectives prepared for the resource management policy (Resource Management Policy, August 1985; Section 2 of this document), as well as agency mandates. The objectives and guidelines emphasize the maximization of each resource, recognizing that the primary planning objective is to optimize each resource in relation to each of the other resources.

2. OBJECTIVES

2.1 Recreation and Tourism Resources

Broad Objectives

A. To ensure the recreation and tourism potential of the planning area is determined and evaluated, and appropriate outdoor recreation and tourism opportunities are identified, consistent with the capabilities of the resource base.

B. To consider the development of commercial tourism and recreation facilities/activities, particularly by the private sector, on public land.

Sub-objective

A variety of strategies for managing outdoor recreation and tourism in the planning area should be evaluated. These strategies could include:

- sharing of administrative responsibilities among Alberta Forestry, Lands and Wildlife (Public Lands Division), Alberta Recreation and Parks and the County of Grande Prairie;
- determination of extent of the urban park integration within the City of Grande Prairie;
- recognition of fish and wildlife resources and their importance in urban park planning, extension programs and tourism;
- consideration within the planning area for establishment of a recreation area;
- assessment and appropriate development of the area's tourism potential;
- development of a recreational access plan.

Justification of Objectives

There is a strong demand for recreation in the planning area. Such activities as hiking, horseback riding, cross-country skiing, motorized vehicle use, archery, fishing and camping are popular. Pressure will continue as the population expands in the region. There

is also a need to resolve conflicts between recreation users, and between recreationists and other users in the area. These conflicts will be further addressed in Section 3.

2.2 Ecological Resources

Broad Objective

To protect unique, representative and sensitive ecological features or systems identified within the planning area.

Sub-objectives

A. To preserve selected unique and representative natural ecosystems and features.

B. To provide for recreational and educational use of ecological resources.

Justification of Objectives

A large portion of the planning area is presently under reservation as a Recreation Natural Area, and is a priority site for consideration as a Natural Area under an Order-in-Council. The area is considered valuable because of the diversity of topographical features and vegetation communities (mosaic of sand dunes and wetlands) occurring there.

2.3 Fish and Wildlife Resources

Broad Objective

To maintain or increase fish and wildlife populations and diversity within the planning area.

Sub-objectives

A. To maintain or increase opportunities for consumptive and

non-consumptive use of the wildlife resource.

B. To maintain or increase opportunities for non-commercial use of the fisheries resource.

C. To ensure productive and diverse habitat and to minimize the loss of key habitat by managing non-commercial and commercial land uses within the planning area.

D. To permit wildlife or fisheries habitat improvement to achieve other sub-objectives.

E. To maintain populations of furbearers and furbearing carnivores and sustain the opportunity for utilization (including harvesting) of these species.

F. To maintain the viability of the existing registered trapping area.

G. To minimize erosion within the planning area and thereby minimize increased sedimentation of the Wapiti River and its tributaries.

Justification of Objectives

Locally significant wildlife and fisheries resources are present in the planning area. In particular, elk, moose, deer, sandhill cranes, furbearers and fisheries are of local importance. The Wapiti River provides good habitat for grayling, walleye, pike, bull trout and numerous other fish species. The lower reaches of the Bear River provide good fisheries habitat, including spawning habitat for walleye. Demand for fisheries and wildlife resources continues to increase throughout Alberta.

2.4 Watershed Resources

Broad Objectives

A. To ensure water supply, water quality and soils are not affected detrimentally by land use activities in the planning area.

B. To ensure water table and drainage are not affected detrimentally by land use activities, including potential construction on the area.

C. To ensure erosion is kept to a minimum.

Sub-objectives

A. To keep development facilities out of the floodplains.

B. To minimize soil erosion occurring from the development of linear facilities, and from agricultural and resource extraction in sensitive areas, through implementation of preventative management guidelines.

C. To ensure appropriate reclamation methods are used where necessary.

Justification of Objectives

Water quality and quantity must be protected, as they are important for consumptive users and for maintenance of the locally significant fish and wildlife resources of the Wapiti River system.

Soil erosion must be minimized primarily because of the negative impacts on water quality and the fisheries through the effects of siltation. Soils in the planning area are highly erodable.

2.5 Historical Resources

Broad Objective

To protect historical resources from potential or actual impact related to future resource development and to conserve these resources for future generations.

Sub-objectives

A. Resource uses in the planning area resulting in land surface disturbance may require Historical Resources Impact

Assessments to be conducted prior to development occurring, as outlined under Section 33(2) of the Historical Resources Act.

B. The Archaeological Survey of Alberta, Resource Management Section, will participate in the land use referral process to review any proposed development projects in all areas of the plan with the exception of patent lands on the northern and southern boundaries of the study area.

2.6 Timber Resources

Broad Objective

Implement forest management to maintain a healthy forest, which will reduce the fire hazard and provide a supply of local forest products.

Sub-objectives

A. To maintain the forest in a healthy condition through sanitation harvesting and/or prescribed burning. This would include the removal of dead, dying, diseased and some overmature trees. It would also include management of dense stands where wildfire may be uncontrollable.

B. To provide a local supply of primary forest products, while recognizing areas that have important environmental value.

Justification of Objectives

The management of forest fire fuels is the principle concern in the planning area. The majority of the area contains conifers which are either mature or nearing maturity. There is evidence of tree mortality now which can be expected to increase with time. It is necessary to remove this type of material from fire-origin forests to prevent uncontrollable fires and maintain a healthy forest. Wildfire poses a threat to developments such as the Evergreen Park fairground and residential subdivisions located in the planning area along the Bear River.

There is a continuous demand by local residents for the right to harvest forest products in the planning area. The overall local demand for forest products is greater than the supply; therefore, the planning area can be looked upon to provide a small supplement of forest products to meet the local demand, and as such can be considered a fringe benefit to the local residents.

The planning area is seriously infected with mistletoe. With proper timber management, including prescribed burning or harvesting of infested stands, the mistletoe can be controlled.

2.7 Grazing Resources

Broad Objectives

To permit grazing on suitable public land which is neither environmentally sensitive nor allocated for higher priority uses.

Sub-objectives

A. To discourage unimproved or improved grazing on environmentally sensitive areas or on areas having limited capability to support grazing.

B. To permit use of the unimproved grazing resource on those lands where unimproved grazing is considered a compatible and an environmentally acceptable use.

C. To manage grazing, ensuring the natural forage and environment are not affected detrimentally.

Justification of Objectives

Land within the plan area is largely unsuitable for grazing by domestic animals. Capability of the land to support grazing is low, while environmental sensitivity is high. There is some demand, though, from local people for grazing leases on the planning area. A few grazing leases currently overlap with the planning area.

2.8 Mineral Resources

Broad Objectives

A. To provide opportunities for industry to define the extent of and develop or produce minerals where reserves have been proven.

B. To provide opportunities for mineral exploration in previously unexplored areas and formations.

Sub-objectives

A. To ensure existing mineral operations are allowed to continue.

B. To reserve parcels having or being suspected of having commercial or potentially commercial quantities of sand, gravel or peat.

Justification of Objectives

The products, revenue and employment created in the mineral resource industry are vital to the economic health of the province. Unnecessary restriction of exploration for and development of mineral resources should therefore be avoided.

3. INTEGRATION OF COMPETING RESOURCE USES

3.1 Introduction

The planning team recognizes the need for integration of several competing resource uses within the planning area. These uses are recreation (motorized and non-motorized, intensive and dispersed), grazing by domestic animals, timber management, fish and wildlife management, industrial development and resource exploration and extraction.

The following scheme, utilizing five sub-areas of the planning area, has been developed by the team to integrate these uses. Selection of suitable resource uses for each of the five sub-areas was based upon the ecological land classification, the terrain sensitivity analysis, information received from government agencies and comments received from public interest groups and the general public. Both the ecological land classification and the terrain sensitivity analysis were provided to the planning team by Resource Evaluation Branch, Alberta Forestry, Lands and Wildlife. This material was derived from a combination of aerial photographic interpretation and appropriate field surveys, followed by an analysis of the results. Comments from public interest groups were received during scheduled planning team meetings and from written submissions. Remarks from the general public were obtained in a series of three "open houses", one general meeting and one mail-back from the document entitled: Public Review, December 1984.

3.2 Sub-area Intents

The sub-areas illustrated in Figure 2 recognize the major land use needs in the planning area. The following information has been compiled for each sub-area: features and constraints to resource uses; what the public would like to see here based upon both the results of the public review in December, 1984, and comments received from the public on the Resource Management Policy document, prepared in August, 1985; primary intent; lists of activities considered suitable and non-permitted uses in each sub-area; and, detailed objectives, detailed guidelines and implications of these decisions.

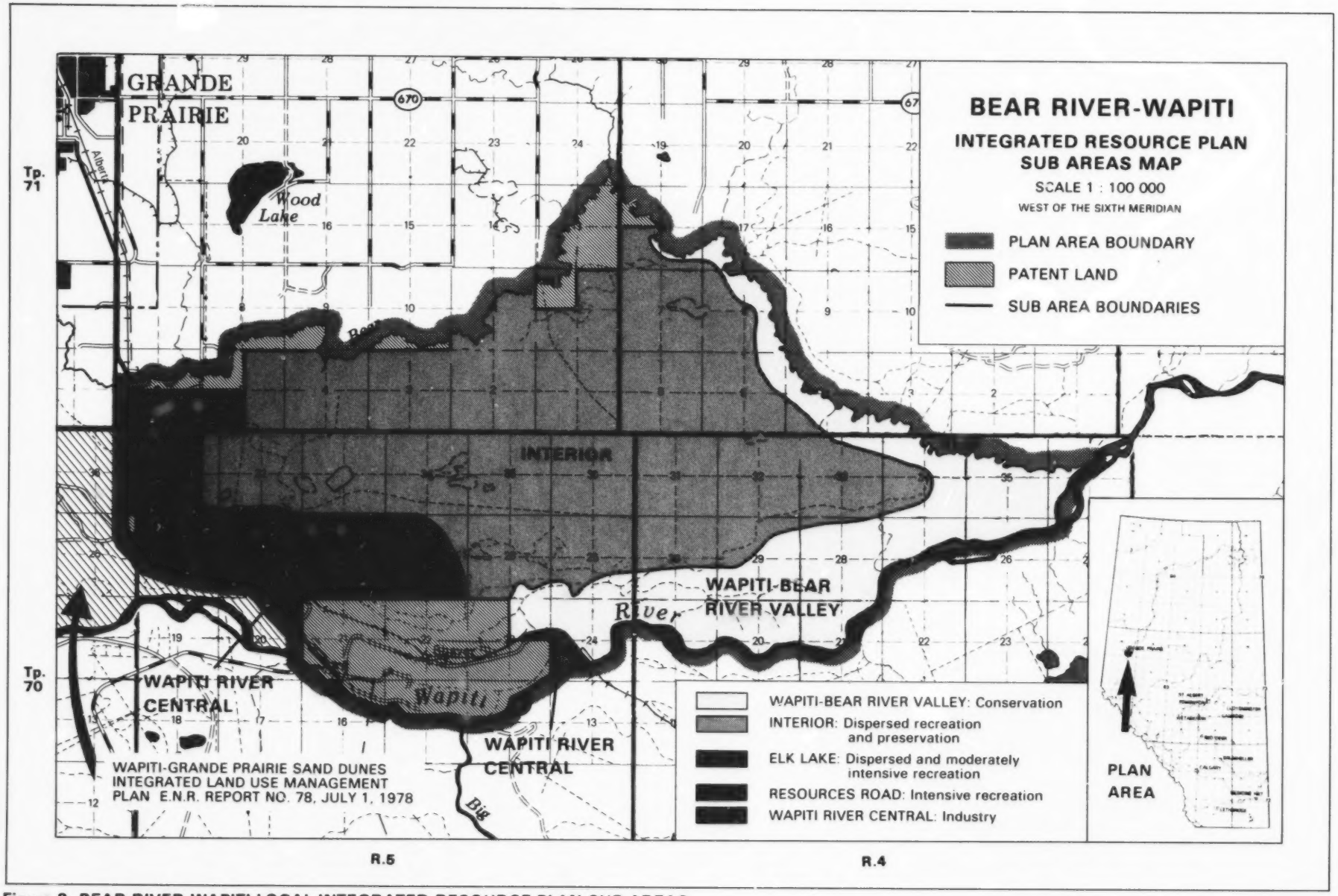

Figure 2. BEAR RIVER-WAPITI LOCAL INTEGRATED RESOURCE PLAN SUB AREAS

3.3 Wapiti-Bear River Valley

Features

The Wapiti-Bear River Valley sub-area begins east of the Procter and Gamble Cellulose Ltd. property, excluding the small parcel of land between the property boundary and the railway. The southern boundary is the north bank of the Wapiti River. This boundary continues east to the confluence of the Bear and Wapiti Rivers, then follows the Bear River to a point just south of the patent land adjacent to the Aspen Ridge housing development. The northern or inner boundary begins at the northeastern corner of the Procter and Gamble property and follows a line east and then north at least 183 metres (200 yards) back from the top of the Wapiti River and Bear River breaks.

Valley walls along the Bear River have steep slopes and well drained, sandy textured soil. The slopes are unstable and prone to erosion. This area contains stands of mixed wood consisting of both aspen and white spruce. Floodplains occur at a few locations along the valley floor. Here the soils are gravels and sand with some silt and clay; slopes are very gentle. Stands of aspen and shrub communities, with some balsam poplar, are associated with point bars. Small stands of white spruce also commonly occur here.

The Bear River valley is an important area for ungulates, for both feeding and shelter, in winter and summer.

Shorelines of both rivers provide resting and feeding areas for fish such as grayling, walleye, pike and bull trout. The confluence of the two rivers is an important spawning site for walleye. Both rivers and their valleys provide important habitat to furbearing mammals.

The Wapiti River valley is characterized by moderate to extreme slopes with a variety of soils. The steeper slopes are often covered by sand to sandy loam over rock and are vegetated primarily by aspen and white spruce and associated understory plants. Some aspen stands occur on the steep slopes, but only where impeded drainage provides better soil moisture conditions, particularly in the areas where slope failures are common. On the moderate slopes, aspen forests and shrub communities dominate.

Glaciofluvial terraces occur along the Wapiti River at an elevation of about 13.7 metres (45 feet) above the river. Soils range from gravels to loamy sands to organic materials; slopes are nearly level to gentle. Soil drainage varies from well to poor, depending upon the slope and type of soil present. Pine, aspen and black spruce communities occur on the terraces, the latter on poorly to imperfectly drained organic soils. Treeless fens, some with patches of open water, are occasionally found here.

Fluvial floodplains and terraces occur within the Wapiti River floodplain and are nearly level to very gently sloping. They are composed of gravels over sandy loam or gravelly sandy loam and support balsam poplar and tall shrub communities, the latter growing close to the water's edge. Aspen is present, as are scattered stands of tall, white spruce.

Between the rough and broken land of the Wapiti River valley walls and the northern boundary of this sub-area is a complex of sand dunes, treed and shrub/sedge fens and non-dune plain.

Parabolic dunes of variable size, with the horns oriented more or less westward, occur, as do dune ridges of varying sizes. Slopes range from gentle to extreme, depending on both the size of the dune and whether the slope is on the windward or leeward side. Open pine/bearberry communities dominate dune tops, the lack of understory vegetation except for widely scattered buffalo-berry indicating the dry soil conditions. Northern slopes contain more soil moisture, reflected by an increase in understory alder cover. Soils of the south and southwest-facing slopes of the larger dunes are very dry and can support only a few shrub, herb and lichen species. South slopes of the smaller dunes, however, are not as dry and can sustain open stands of pine. Along the lower slopes of the large and small dunes, especially on east and south-facing aspects, a narrow band of aspen/shrub woodland marks the transition between thick sand deposits and organic soils. In addition to the aspen, willow, alder, white spruce and wild rose are common species here.

The non-dune plain consists of rolling to undulating topography and contains many small, poorly-drained depressions where organic soils occur. The drier sites support pine/bearberry communities, while the thinner soils and the swales between sand knolls support aspen/shrub communities. Recurring fires have probably retarded plant succession,

as white spruce was not detected in the understory. The small depressions in this area are occupied by shrub fen and black spruce plant types.

Shrub/sedge fens, characterized by thick organic deposits, are poorly drained. Sedge fens occupy the wettest areas and often have ponds occurring at their centres. Shrub fens are found at the edge of sedge fens, usually near the base of sand dunes. Willows and bog birch are more common in this slightly drier area.

Treed fens typically contain stands of black spruce and tamarack with a hummocky moss layer. These fens are more acidic and nutrient poor than the shrub/sedge fens. A variety of shrubs, forbs and mosses occur in the understory. The rapid build-up of organic matter due to moss growth, in particular, results in this type of site being somewhat drier than the shrub/sedge fen types.

The Wapiti River valley provides important habitat to ungulates for both feeding and shelter, in winter and summer.

The potential for gravel is good on the glaciofluvial terraces above the Wapiti River, and on the slopes of the Bear River. According to a report prepared by the Alberta Research Council in 1980, there are two gravel deposits of noteworthy size above the Wapiti River. The first, located in Section 36, is an alluvial terrace deposit that has been bisected by the Bear River as it joins the Wapiti River. This deposit does not appear to have large economic quantities of gravel and sand. Coarse to fine sandy gravel overlies sandstone bedrock to a maximum thickness of 1.5 m. The granular material is discontinuous and is covered by eolian or slope wash material in some places. The second, located in Sections 20, 21, 28 and 29 (Township 70, Range 4), contains possible reserves of coarse, sandy gravel in an alluvial terrace deposit which could exceed 2 000 000 m^3. The granular material (up to 5 m thick) rests on bedrock and is covered by up to 0.5 m of overburden. The area is well drained and has potential for development should the resource be required. At present there has been no extraction of material and the deposit is inaccessible to standard vehicular traffic.

There is a proven gas reserve in the southern fringe of this sub-area, bordering the Wapiti River Central sub-area and the Procter and Gamble property. There is hydrocarbon potential on remaining land, although the very limited exploration in the area precludes estimation of this potential.

A road is located near the northern (inner) boundary of this sub-area (Figure 1). A second road branches from the first one to meet the Wapiti River at a point approximately half-way between the Wapiti River Central sub-area and the confluence of the two rivers. These are the only roads in the Wapiti-Bear River valley. There are a few short trails which branch from the second road, and a short trail arising from the northern limit of the sub-area which crosses the Bear River. Access into and within this sub-area by road or trail is very limited.

The only surface leases within this sub-area are for grazing. They occupy approximately one-and-one-half sections of land and are located adjacent to the confluence of the two rivers. Subsurface leases for petroleum and natural gas are held on approximately 65 percent of lands within this sub-area. Surface restrictions currently apply.

There are two reservations which together occupy the entire sub-area. The first occupies that portion of land north of the Wapiti River to the confluence of the two rivers. This reservation was put in place to prevent development from occurring here because of the noxious odour from the Procter and Gamble plant during a southwest wind. The second reservation sets aside the remainder of the sub-area for a Recreation Natural Area. (Please refer to Section 2.2 for explanation.)

Hunting is presently allowed on this sub-area.

Constraints to Activities

The most obvious constraint to activities is the steep, erodable slopes along both the Bear and Wapiti Rivers. The only activities this area could support would be those not requiring developed facilities, including roads or trails. The dunes and non-dune plain also present severe limitations to activity. When vegetation is removed from these areas, winds will cause the sands to blow, creating sand drifts and further degradation of the area. These sites, therefore, could support only limited use. The shrub/sedge and treed fens are highly sensitive to disturbance because of the permanently wet organic soils. It is unlikely many activities could occur on these sites without serious degradation occurring.

The Fish and Wildlife Division of Alberta Forestry, Lands and Wildlife considers the Wapiti-Bear River Valley sub-area to be the most important sub-area for ungulates within the entire planning area. Based on a January, 1984 aerial survey, ungulate densities were estimated to be 2.4 animals per section of land, with moose the predominant species. The valleys of the two rivers provide excellent cover and browse, both particularly important during the winter months. The non-dune plain, containing numerous small fens, offers good quality cover and browse. Opportunities for habitat enhancement using such methods as prescribed burns, are excellent in this sub-area because of the south-facing slopes of the Wapiti River. Any development occurring in this sub-area, or heavy traffic occurring on existing roads and trails would seriously lower the value of this sub-area to ungulates.

The reservation placed on the Bear River breaks area for a proposed Recreation Natural Area currently does not allow industrial surface access. The intent of this reservation is to allow dispersed, low intensity recreation.

The reservation placed on the Wapiti River breaks area for Procter and Gamble currently does not allow developed facilities, although it would allow surface access routes for linear developments.

The existing grazing lease contains slopes of both the Bear and Wapiti Rivers, glaciofluvial terraces and non-dune plain. Very poor quality grazing for domestic animals is available here.

Finally, the odours coming from the Procter and Gamble plant during a southwest wind would make many activities here undesirable, from the point of view of those partaking in the activity.

What the Public Wants

Based on the results of the Public Review, December 1984, the majority of respondents are in favor of dispersed recreation and fish and wildlife management occurring within this sub-area. Provided with space on the form to comment on other activities and uses that might be suitable here, members of the public made the following suggestions:

Bear River breaks

-- peripheral agricultural uses
-- geophysical activities
-- shooting should not be allowed

Wapiti River breaks and area

-- nature study
-- non-motorized recreation
-- no new trails should be cut
-- snowmobiling
-- motorcycle riding
-- motorized vehicles
-- motorized vehicles only when frozen
-- petroleum and natural gas exploration
-- linear developments

Primary Intent

To conserve in as natural a state as possible, with a priority on fish and wildlife management.

The Wapiti-Bear River Valley sub-area is considered to be of local, if not regional, significance to ungulates. It should, therefore, be maintained in a state as close as possible to its present one to preserve both the quality and quantity of habitat. Access should be limited and further development discouraged.

Activities Considered Suitable

-- Wildlife and wildlife habitat management, for ungulates (elk, deer, moose) and furbearing mammals, in particular;
-- Fisheries and fisheries habitat management, for walleye in particular, in both the spawning and rearing stages;
-- Timber management for insect, disease and fire control utilizing a variety of methods;
-- Dispersed, non-motorized recreation, where only existing roads and trails are used. Examples of uses are hiking, horseback riding, cross-country skiing, hunting, fishing;

-- Conditional gravel removal. Access and timing of extraction will be subject to approval by appropriate government agencies.
-- Conditional petroleum and natural gas exploration and development. Access and timing will be subject to approval by appropriate government agencies.
-- Conditional linear developments (only those needed for petroleum and natural gas seismic activities).

Non-permitted Uses

-- Intensive, non-motorized recreation;
-- Motorized recreation;
-- Grazing by domestic animals;
-- Peat extraction;
-- Sand extraction;
-- Linear developments (other than those needed for geophysical activities);
-- Industrial developments;
-- Subdivision developments;
-- Sanitary landfill siting;
-- Other similar uses.

ECOLOGICAL RESOURCES

Objective

To protect the ecological resources of the area, including sensitive features such as dunes and wetlands and wildlife habitat. To conserve the natural features for public appreciation and education and for low intensity recreation.

Guidelines

1. An appropriate land use reservation will be placed to underline the value of the ecological resources and the main intent of the area. A local (volunteer) public group will be selected to "adopt" the area once the reservation is proposed for Order-in Council.

2. Fur trapping and outfitting are the only permitted commercial activities.

3. Management programs (i.e., forestry, fish and wildlife) must use existing access, helicopter access or river access and be properly referred before implementation.

4. No surface dispositions will be permitted except for authorized cutting and use of designated trails (e.g. Letter of Authority, Licence of Occupation).

5. An inventory of sand and gravel deposits in the vicinity of the City of Grande Prairie should be conducted to determine availability, so the most economically feasible and least environmentally sensitive areas can be identified. A survey has been conducted by the Alberta Research Council on a portion of this area.

6. Exploration and drilling for petroleum and natural gas may be allowed, with locations (e.g., well, road and pipelines) and timing to be subject to approval by appropriate government agencies.

7. Location and spacing of geophysical lines will be regulated; 1.5m wide hand cut lines only will be permitted; slash is to be placed back on the line at the completion of the geophysical program. The guideline will be maintained throughout the sub-area, except on level or nearly level areas where gravel extraction has occurred or is likely to occur in the near future.

Implications

The guidelines will permit protection of the ecological resources of the area while allowing dispersed non-motorized recreation, restricted petroleum and natural gas exploration and development and continued operation of the existing trapline.

Issuance of Letters of Authority and Licences of Occupation for creating use and maintenance of trails may assist in controlling the impact of unauthorized motorized use of the sub-area.

FISH AND WILDLIFE RESOURCES

Objectives

1. a) To maintain or increase fish & wildlife populations and species diversity, including furbearers and furbearing carnivores within the context of the regional and provincial objectives.

b) To maintain or enhance fisheries and wildlife habitat, including unique features such as mineral licks, wetlands and other important habitats.

2. To maintain or increase opportunities for utilization (consumptive and non-consumptive) of the fish and wildlife resources including furbearers and furbearing carnivores.

Guidelines

(For Objective 1)

1. New grazing leases will not be permitted in this sub-area. Range improvement will not be permitted on existing grazing leases. Existing grazing leases will be phased out by non-assignment or replacement land.

2. To minimize harassment and habitat destruction, motorized access for recreation will not be allowed. Motorized access for petroleum and natural gas and other industrial uses will only be allowed subject to site specific restrictions.

3. Any new activities will be planned to control erosion and subsequent siltation of water courses.

4. Projects will be established under programs such as "Buck for Wildlife" for habitat enhancement. Projects could include prescribed burns, streambank fencing, etc. Ungulate densities should be increased from the present 2.4 to 4 animals per section of land.

5. Hunting and fishing regulations will be subject to the current fish and wildlife review process.

6. Any timber management activities will maintain or enhance fish and wildlife habitat value (reviewed by Fish and Wildlife personnel).

7. Recreational leases will not be permitted.

8. As there is a need for gravel in the area, gravel operations may be conditionally approved, e.g. minimal new access, timing restrictions.

9. Geophysical activity will also be conditional. For example, minimum line width, timing restrictions and helicopter assistance may be required due to terrain and habitat concerns.

(For Objective 2)

1. Non-consumptive uses of the resources will be promoted through educational programs (Project Wild, Wildlife in Your Backyard, pamphlets, etc.).

2. The existing registered trapping area will be maintained.

Implications

There may be considerable impact to wildlife and possibly fisheries by gravel operations in the valley corridor. Timing restrictions and access control will help to mitigate impacts.

There is the potential for increasing ungulate densities primarily through habitat enhancement in the Wapiti River Valley.

Long term reduction of grazing in this sub-area will increase value of the habitat for wildlife by reducing competition for forage, etc.

RECREATION AND TOURISM RESOURCES

Objectives

1. To ensure low levels of dispersed non-motorized recreation, including, but not limited to, cross-country skiing, hiking, horse-back riding, hunting and fishing, without establishing any new trails.

Guidelines

1. The major administrative responsibilities will be shared between Public Lands and Fish and Wildlife Divisions.

2. No additional trails or access for recreation will be constructed.

Implications

The objectives are to allow low intensity recreation in a conservation guideline. Soil, vegetation and wildlife are to be preserved in as natural a state as possible.

GRAZING RESOURCES

Objective

The present grazing lease has 50 percent of the grazing capacity that unimproved grazing would have on a clay soil. Range improvement or extension of the present lease is not desirable.

Guidelines

1. The portion of the lease within the planning area will be non-assignable. The lease will be terminated when the lessee stops active use of the lease area.

2. Those segments of Crown land grazing leases that overlap into this sub-area will be terminated when these leases are due for renewal.

Implications

A minimum or absence of agricultural use would allow the preservation of a fragile environment and allow the utilization of the sub-area for wildlife habitat and dispersed non-intensive recreation.

TIMBER RESOURCES

Objective

Forest management should be implemented to maintain a healthy forest. This will reduce the fire hazard and provide a supply of local forest products.

Guidelines

1. Any timber harvesting operations greater than 10 acres in size will be referred to the Fish and Wildlife Division and Natural Areas coordinator for their review.

2. During preparation of the fire management plan, the County of Grande Prairie will consult with the Alberta Forest Service and Natural Areas Coordinator.

WATERSHED RESOURCES

Objectives

1. To minimize soil erosion resulting from the activities within this area.

2. To ensure appropriate reclamation methods are used following termination of all surface disturbances.

Guidelines

1. Existing operating restrictions on resource management activities will be implemented to protect watershed quality.

2. Additional operating restrictions will be applied on sensitive areas, if necessary.

MINERAL RESOURCES

Objectives

1. To provide opportunities for industry to define the extent of and develop or produce minerals where reserves have been proven.

2. To provide opportunities for mineral exploration in previously unexplored areas and formations.

Guidelines

Please refer to **ECOLOGICAL, FISH AND WILDLIFE,** and **WATERSHED WATERSHED RESOURCES,** and add:

1. Geophysical activity will be limited to handcut lines only, and existing trails, except where active gravel extraction is occurring or is likely to occur on the same alignment where the geophysical will be occurring in the near future; helicopter assistance may be required due to terrain restrictions.

Implications

Restricted geophysical access (e.g., limited motorized access minimum width hand cut lines, helicopter assistance) may cause data gathering to be expensive and time consuming. Developing the potential resource may be technically difficult and expensive because of terrain-related restrictions (e.g., directional drilling may be required.)

3.4 Interior

Features

The Interior sub-area is bounded on the north by the Bear River and the southern boundaries of patent land along this river. It is bounded on the east by the Wapiti-Bear River Valley sub-area which also forms part of its southern boundary. The remainder of the southern boundary is the northeastern limit of Procter and Gamble's property and the northern boundary of the Elk Lake sub-area. The western boundary of the Interior is the eastern boundary of the Resources Road sub-area.

The Interior is the largest of the five sub-areas, encompassing approximately 20.5 sections of land. The two primary land features are sand dunes and treed and shrub/sedge fens, each occupying slightly less than 50 percent of this sub-area and dispersed throughout it. The remainder consists of several ponds, the largest and most numerous situated in the western half of the sub-area. These ponds commonly occur in the centre of sedge fens. Drainage in this part of the sub-area is virtually non-existent. The yellow pond lily is a common plant found floating on the water surface.

The dunes, by themselves, offer sparse forage and browse for ungulates. The dune/fen complex, however, provides important habitat, particularly if the fens contain shrubs and sedges rather than just trees. Here there is moderately abundant forage in summer and highly abundant browse and shelter all year-round, particularly for elk.

Depending on the water depth, characteristics of the shoreline and presence or absence of appropriate species of submerged and emergent aquatic plants, the ponds can offer poor to excellent habitat for ducks, wading birds and shorebirds. Although these ponds were not investigated to this level of detail for this particular study, it is known, for example, that the sandhill crane uses the ponds in the western end of this sub-area. Muskrats and beavers are also resident in these open waters.

The potential for petroleum and natural gas cannot be estimated as exploration and assessment has been minimal.

Roads and trails in this sub-area are limited to the southern boundary, the western edge of the complex of ponds located in the western half of the sub-area, and adjacent to the Aspen Ridge housing development (Figure 1). There is very limited access to the centre and to the eastern half of this sub-area.

There are no surface leases within this sub-area. Subsurface leases for petroleum and natural gas are held on approximately 40 percent of lands within this sub-area. Surface restrictions currently apply.

All of this sub-area, with the exception of a few quarter sections adjacent to the Bear River and the small portion of land in the western extremity between the two power-lines, is contained within two reservations. The largest reservation sets aside at least 90 per cent of this land for a Recreation Natural Area. (Please refer to Section 2.2 for explanation.) The second reservation currently limits development east of the Procter and Gamble plant because of the noxious odour in a southwest wind.

Hunting is allowed on this sub-area, with the western two-thirds limited to the use of bow and arrow.

Constraints to Activities

The main constraint to activities is the sand dune/wetland complex characterizing this sub-area. Removal of vegetation from dunes results in blowing, drifting sand. Only very limited activity could occur here without permanently destroying the dune features. The wetlands are also extremely sensitive to use, owing to the permanently wet, organic soils.

The concentration of ponds in the western half of the sub-area is an attractive feature. Great care must be taken, however, to ensure recreational activities here do not result in a diminished quality of the area.

The reservation placed on the majority of this land for a Recreation Natural Area currently allows surface access with conditions on the western third of the sub-area. Pending final approval of the Natural Area, surface access is not allowed on the eastern two-thirds of the proposed Natural Area. There is approximately one-half section of

land contained within the reservation for Procter and Gamble currently not allowing developed facilities, although it would allow surface access routes for linear developments. This parcel is adjacent to and at the midpoint of the Wapiti-Bear River Valley sub-area.

What the Public Wants

Based on the results of the Public Review conducted in December, 1984, the majority of respondents feel dispersed, non- motorized recreation on existing trails should be allowed in this sub- area. Most people do not object to the creation of new trails for these same types of activities. The majority of respondents do not feel selective timber extraction is appropriate for this area.

Other uses suggested by the public as part of this review are:

-- nature study
-- wildlife management
-- shooting should not be allowed
-- restricted motorized recreation
-- light recreational vehicle use
-- motorized sport
-- truck use; no new trails cut
-- snowmobiling on existing trails
-- mineral exploration

Primary Intent

Dispersed recreation, fish and wildlife management and ecological resource protection.

The Interior sub-area has suffered very little disturbance because human use of the area has been neither intensive nor extensive due to limited access. As the largely intact sand dune/wetland complex is considered a valuable resource because of the diversity of topographical features and vegetation communities, this sub-area should be maintained in a state as close as possible to its present one. Access should be limited and further development discouraged.

Activities Considered Suitable

-- Wildlife and wildlife habitat management, in particular, for ungulates (elk, deer, moose), furbearing mammals and sandhill cranes;
-- Erosion control to maintain downstream water quality and to allow habitat creation for fisheries.
-- Timber management for insect, disease and fire control utilizing a variety of methods;
-- Dispersed, non-motorized and motorized recreation, with motorized recreation occurring on designated existing trails or on trails identified through a recreational access plan. Motorized vehicles will be snowmobiles or all-terrain vehicles with low ground pressure tires;
-- Conditional petroleum and natural gas exploration and extraction. Access and timing will be subject to approval by appropriate government agencies;
-- Conditional linear developments (only those needed for petroleum and natural gas exploration and extraction).

Non-permitted Uses

-- Intensive, non-motorized recreation;
-- Motorized recreation off designated trails;
-- Grazing by domestic animals;
-- Peat extraction;
-- Sand extraction;
-- Linear developments (other than those needed for petroleum and natural gas exploration and extraction);
-- Industrial developments;
-- Subdivision developments;
-- Sanitary landfill siting;
-- Other similar uses.

ECOLOGICAL RESOURCES

Objectives

1. To protect the ecological resources of the area, including sensitive sand dune and wetland features and wildlife habitat.

2. To conserve the natural features for public appreciation and education and for low intensity recreation.

Guidelines

1. An appropriate land use reservation will be maintained to underline the value of the ecological resources and the main intent of the area. A local (volunteer) public group will be selected to "adopt" the area once the reservation is proposed for Order-in-Council.

2. A recreational access plan must be completed before additional trails are constructed.

3. Motorized vehicles for recreational purposes will be restricted to snowmobiles and low pressure tire vehicles and their use restricted to designated trails.

4. Organizations and groups may apply for dispositions (Letter of Authority, Licence of Occupation) to maintain and use trails.

5. The above dispositions must not restrict non-motorized public access.

6. Location, intensity and method of petroleum and natural gas exploration and development will be restricted to minimize soil disturbance and access management problems.

   Specific restrictions on petroleum and natural gas activity include the following, depending upon the situation:

   (a) Geophysics

   - motorized equipment may be restricted to designated roads; elsewhere, geophysical activity may require helicopter, horses or low ground pressure tire vehicle support. The intent is to prevent surface soil disturbance and to discourage subsequent all-terrain vehicular use of the lines.
   - all lines will be restricted to a width not greater than 1.5 m and surface soil disturbance prevented. This guideline will be maintained throughout the sub-area except on level or nearly level areas where gravel extraction has occurred or is likely to occur in the near future.

- geophysical activity will occur only with adequate frozen ground.
- replacement of slash back onto cutline at completion of the geophysical program will be required.

(b) Wellsites

- access during frozen ground conditions only will be allowed for drilling purposes.
- location of temporary access will be restricted and must not involve surface soil disturbance.
- if a gravel pad is used, some method to ensure removal of pad materials from the original soil surface during reclamation must be employed.
- wellsites must be located in flat areas with minimum wellsite dimensions (i.e., no levelling of dunes).
- remote sumps may be required.
- production roads will be designed and aligned to minimize environmental damage and access management problems.

(c) Pipelines

- linear developments are restricted to petroleum and natural gas gathering systems.
- construction will occur only during adequately frozen ground conditions.
- minimum right-of-way will be used.
- existing trails/roads must be followed as much as possible.
- slash must be replaced onto the line.
- the site must be revegetated with native species.
- revegetation may also require mulching and fertilizer applications.

Implications

Although restricted, permitting petroleum and natural gas activity within this relatively undisturbed area has substantial potential for creating access management problems, conflicts with recreational users and localized soil erosion problems.

Guidelines will permit educational and low intensity dispersed recreational use of the area.

A recreational access plan will identify areas environmentally suitable for non-motorized trail development.

Issuance of Letters of Authority and Licences of Occupation for trail use and maintenance may assist in providing on-site management for this sub-area.

FISH AND WILDLIFE RESOURCES

Objectives

1. a) To maintain or increase fish and wildlife populations and species diversity, including furbearers and furbearing carnivores.

   b) To maintain or enhance fisheries and wildlife habitat, including unique features such as mineral licks, wetlands, etc.

2. To maintain or increase opportunities for utilization (consumptive and non-consumptive) of the fish and wildlife resources, including furbearers and furbearing carnivores.

Guidelines

(For Objective 1)

1. New grazing leases will not be permitted in this sub-area.

2. Dispersed motorized recreation will be restricted to existing trails or trails approved under an access plan to reduce harassment and habitat loss, as well as erosion problems.

3. Recreation leases will not be issued. This will avoid intensive use (harassment, habitat destruction).

4. Projects should be considered under programs such as "Buck for Wildlife" for habitat enhancement. Projects could include prescribed burns, fish habitat development (fish ponds), etc. Present densities of 1.4 ungulates (primarily elk) per section of land should be maintained. Opportunities for large-scale ungulate habitat enhancement are limited because of sensitive soils and vegetation type.

5. Hunting and fishing regulations will be subject to the current Fish and Wildlife review process. (Note: County bylaws restrict the use of firearms in this area.)

6. Any timber management activities will maintain or enhance fish and wildlife habitat value.

7. Disturbance around sandhill crane habitats (lakes in western portion of sub-area) must be minimized.

(For Objective 2)

1. Retain use of firearms on eastern part of sub-area at least at the present time, as recreational use is low density.

2. Continue to permit use of bow and arrow on western portion of sub-area.

3. Promote non-consumptive uses of the resources through educational programs (e.g., Project Wild, Wildlife in Your Backyard, pamphlets, etc.).

4. Maintain the existing registered trapping area and consider the remainder of this sub-area for registered trapping also.

5. Consider fish habitat development to increase fishing opportunities.

Implications

There may be potential for expanding the registered trapping area to include all of this sub-area.

Fishing opportunities may be increased by the development of fish habitat in this sub-area.

By not allowing grazing in this sub-area, the value of the habitat for wildlife will be maintained by a reduction in competition for forage.

RECREATION AND TOURISM RESOURCES

Objectives

1. To ensure low levels of motorized and non-motorized recreation with motorized recreation restricted to designated routes outlined in the recreational access plan, and non-motorized recreation limited to existing trails, as defined by the recreational access plan. Motorized vehicles will be snowmobiles or all-terrain vehicles with low pressure tires.

2. To allow hunting in this sub-area, with the western two-thirds limited to the use of bow and arrow in accordance with the county bylaw.

Guidelines

1. The major administrative responsibilities would be shared between Public Lands and Fish and Wildlife Divisions.

2. Recreational access plans would be developed in consultation with interested parties.

3. Expansion of existing trails will be limited to the completion of trail loops.

4. Motorized vehicles will be restricted to designated trails as determined and identified by the recreational access plan. A conceptual trail map will be prepared in conjunction with the implementation document.

Implications

The priority use is moderate intensity recreation with preservation of the soils, vegetation and wildlife in as natural a state as possible.

GRAZING RESOURCES

Objective

1. Native grazing values are so limited as to be insignificant.

Guideline

1. The absence of grazing values precludes issuing any agricultural dispositions.

Implications

The absence of grazing will have no conflicting influence on any other uses.

TIMBER RESOURCES

Objective

1. Forest management should be implemented to maintain a healthy forest. This will reduce the fire hazard and provide a supply of local forest products.

Guidelines

1. Any timber harvesting operation greater than 4 hectares (10 acres) in size will be referred to the Fish and Wildlife Division and Natural Areas Coordinator for their review.

2. During preparation of the fire management plan, the County of Grande Prairie will consult with the Alberta Forest Service and Natural Areas Coordinator.

3. Timber within 100 m of river banks and interior lakes will be selectively harvested.

Implications

This is not a high site forest and will never have commercial value. However, some harvest or other management system is needed to maintain the forest in a healthy state.

WATERSHED RESOURCES

Objectives

1. To minimize soil erosion in the Bear River Valley and adjacent to ponds, resulting from the activities within this area.

2. To ensure appropriate reclamation methods are used following termination of all surface disturbances.

Guidelines

1. Existing operating restrictions on resource management activities will be implemented to protect watershed quality.

2. Additional operating restrictions will be applied on sensitive areas, if necessary.

MINERAL RESOURCES

Objectives

1. To provide opportunities for industry to define the extent of and develop or produce minerals where reserves have been proven.

2. To provide opportunities for mineral exploration in previously unexplored areas and formations.

Guidelines

Please refer to **ECOLOGICAL, FISH AND WILDLIFE, RECREATION AND TOURISM** and **WATERSHED RESOURCES.**

Implications

Possible restrictions on geophysical operations (no soil disturbance, frozen ground conditions, minimum width lines, limits on spacing and alignment, restricted access for mobilization) may increase the expense and time needed to gather geophysical data.

Possible restrictions on wellsites and development (frozen ground only, no soil disturbance during initial access, restricted alignment of production road and pipeline, flat ground location of wellsite, no levelling of dunes, remote sump) may increase the technical difficulty as well as the expense and time needed to do exploratory drilling and development.

3.5 Elk Lake

Features

The Elk Lake sub-area is bounded on the south by the Procter and Gamble property and by the railway, on the west by the Resources Road sub-area and on the north and east by the Interior sub-area.

The two primary land features are sand dunes and treed and shrub/sedge fens, each occupying slightly less than 50 percent of this sub-area and dispersed throughout it. The remainder consists of non-dune plain situated along the southern boundary adjacent to the Procter and Gamble property in the middle of the sub-area.

As in the two previous sub-areas, the dune/fen complex offers important habitat for ungulates all year-round.

The potential for petroleum and natural gas within this sub-area is unknown, as exploration and assessment have been only peripheral.

Roads and trails are found throughout this sub-area (Figure 1). They are more concentrated, however, in the western third, adjacent to the powerline forming the western boundary of the sub-area. Off-highway motorized vehicles make extensive use of the road and trail system. The east end of Elk Lake is a favorite destination. Horses and hikers often must compete for space with motorized vehicles along the main road, particularly in the western half of the sub-area.

There are no surface leases within this sub-area. Subsurface leases for petroleum and natural gas are held on all lands within this sub-area. Surface restrictions currently apply.

Approximately one-third of the area is under reservation for a proposed Recreation Natural Area (please refer to Section 2.2 for explanation). Pending final approval of the Natural Area, surface access is allowed, with conditions. Approximately two-thirds of the area is currently under a second reservation limiting development north and west of the Procter and Gamble plant. The reservation was placed on these lands for two reasons: to protect the plant site from vandalism, and to set aside the land for possible plant expansion.

Hunting is allowed in this sub-area. As the discharge of firearms is prohibited by a County bylaw, hunting is limited to bow and arrow.

Constraints to Activities

The main constraint to activities is the sand dune/wetland complex characterizing this area. Similar to the two previous sub-areas, only very limited activity could occur here without permanently destroying the dunes and wetland features.

Pending final approval of the Natural Area, a reservation placed on one-third of this land for a proposed Recreation Natural Area allows surface access, with conditions. The reservation placed on approximately two-thirds of the area for Procter and Gamble limits development to resource exploration and extraction, and linear developments.

What the Public Wants

This sub-area boundary has been expanded considerably since the Public Review was conducted in December, 1984. Though the area now excludes all land between the Resources Road and the railway, it includes Elk Lake and has doubled in size. The results from the earlier survey for the reduced sub-area indicate the majority of respondents feel dispersed, non-motorized recreation on existing or newly created trails is an acceptable use for the area. Fifty percent of respondents also feel motorized recreation is an acceptable activity. Peat and sand extraction are considered acceptable here, although there is a large contingent opposed to such activities in this area. The majority of respondents are opposed to petroleum and natural gas exploration and extraction, industrial developments and sanitary landfill siting. There is an almost equal split of opinion over the construction of linear developments here.

Other uses suggested by the public as part of this review are:

-- selective timber extraction;
-- off-road recreation use by snowmobiles and trail bikes; and
-- no shooting.

Primary Intent

Dispersed and moderately intensive recreation.

ELK LAKE

The Elk Lake sub-area presently contains roads and trails throughout, although the concentration is greater in the western third where some degradation of the dune/wetland complex is apparent. The presence and use of the roads and trails, the environmental sensitivity of the sand dune/wetland complex, the beginnings of dune/wetland destruction in the western end of the sub-area, the opportunity for quality recreation in the vicinity of Elk Lake, availability of access to the Resources Road, the two reservations restricting development, and the unsuitability of the area to most forms of development all serve to point the direction resource use in this sub-area should take: maintenance of the area in a state as close as possible to its present one to preserve both the quality and quantity of recreation land. Some additional access might be granted, particularly if a suitable location is identified through a recreational access plan, but by and large, further development should be discouraged.

Activities Considered Suitable

- -- Dispersed and moderately intensive motorized and non-motorized recreation on trails only. Non-motorized users can apply to construct new trails, particularly if the trails have been identified through a recreational access plan. Recreational leases may be available to users for activities considered compatible with the intent of the area, including lands under reservation for Procter and Gamble. High intensity motorized recreation will be considered on designated routes.
- -- Wildlife and wildlife habitat management for ungulates (elk, deer, moose), and furbearing mammals, in particular;
- -- Timber management for insect, disease and fire control utilizing a variety of methods;
- -- Conditional petroleum and natural gas exploration and extraction. Access and timing will be subject to approval by appropriate government agencies;
- -- Conditional linear developments (only those needed for petroleum and natural gas exploration and extraction).

Non-permitted Uses

- -- Permanent structures (including recreational facilities);
- -- Grazing by domestic animals;

-- Peat extraction;
-- Sand extraction;
-- Linear developments (other than those needed for petroleum and natural gas exploration and natural gas exploration and extraction);
-- Industrial developments;
-- Subdivision developments;
-- Sanitary landfill siting;
-- Other similar uses.

ECOLOGICAL RESOURCES

Objective

1. To protect the ecological resources of the area, including sensitive sand dunes and wetlands. To allow a moderate level of a variety of recreation, while conserving the natural features as much as possible.

Guidelines

1. An appropriate land use reservation will be maintained.

2. A recreational access plan must be completed before additional trails are constructed.

3. Dispositions (Letter of Authority, Licence of Occupation) may be issued for trail construction, maintenance and use if public access is not restricted.

4. Location, intensity and methods of all resource activities will be regulated to minimize soil disturbance and access management problems.

5. Linear developments will be restricted to guideline 7, and pipeline gathering systems, be of minimum width and follow existing roads/trails as much as possible.

6. Application of fertilizer, mulching and revegetation with native species may be required on all disturbed areas at the completion of activities.

7. All new geophysical lines must be hand cut, a maximum of 1.5 m wide, with activity occurring during frozen ground conditions only (no surface soil disturbance permitted).

8. Wellsites must be restricted to existing roads/trails as much as possible.

Implications

As much of this sub-area is presently laced with trails and roads, a range of activities can occur, with appropriate conditions, without having the same potential for further destruction of the ecological resources as in the Interior sub-area.

FISH AND WILDLIFE RESOURCES

Objectives

1. a) To maintain or increase fish and wildlife populations and species diversity, including furbearers and furbearing carnivores.

   b) To maintain or enhance fisheries and wildlife habitat, including unique features such as mineral licks, wetlands, etc.

2. To maintain or increase opportunities for utilization (consumptive and non-consumptive) of the fish and wildlife resources, including furbearers and furbearing carnivores.

Guidelines

(For Objective 1)

1. No new grazing leases will be permitted.

   NOTE: The major concern is sensitive soils; other concerns are competition for forage, fencing etc.

2. Motorized recreation will be restricted to existing trails. Any new trails will be part of the recreational access plan and will be designed to minimize habitat destruction and erosion.

3. Any approved industrial use will be well planned to avoid highly sensitive areas, and to control erosion.

4. Projects should be considered under programs such as "Buck for Wildlife", for habitat enhancement. Projects could include prescribed burns, fish habitat development (fish ponds) etc. Present densities of 1.4 ungulates (primarily elk) per section of land should be maintained. Opportunities for large-scale ungulate habitat enhancement are limited because of sensitive soils and vegetation type.

5. Hunting and fishing regulations will be subject to the current Fish and Wildlife review process. (Note County bylaws regarding firearms).

6. Any timber management activities will maintain or enhance fish and wildlife habitat value.

(For Objective 2)

1. Continue to permit use of bow and arrow on sub-area.

2. Promote non-consumptive uses of the resources through educational programs.

3. Consider this sub-area as (or for inclusion into) a registered trapping area.

4. Consider fish habitat development to increase fishing opportunities.

Implications

Provision for facility development in this sub-area, as well as additional access provided by conditional petroleum and natural gas

exploration and development may increase all-terrain vehicle activity. This would increase disturbance to wildlife and have the potential for disturbing sensitive soils.

Fishing opportunity may be increased by the development of fish habitat in this sub-area.

RECREATION AND TOURISM RESOURCES

Objectives

1. To allow dispersed and moderately intensive motorized recreation (examples: snowmobiles and all-terrain vehicles with low ground pressure tires) on designated trails only.

2. To ensure high intensity motorized recreation (example: car rally) occurs on designated routes only.

3. Non-motorized users may apply to construct new trails, particularly if the trails have been identified through a recreational access plan.

4. Recreational leases will be available to users for activities considered compatible with the intent of the area. This could include primitive camp sites or group campgrounds.

Guidelines

1. Regular and off-highway motorized users will be advised by appropriate signs to utilize existing roads and trails only.

2. Non-motorized users who may require alternate trails will be required to file a plan for development and be approved by appropriate agencies.

3. Associations may apply for recreational leases with a plan of development to be approved by appropriate agencies.

4. Planning assistance will be provided by the Alberta government to any group interested in pursuing primitive or temporary camping facilities in this sub-area.

5. Future recreation development in this sub-area should allow for a buffer between the Elk Lake sub-area and the Procter and Gamble property. This will be addressed further in the recreational access plan. This plan could also include a provision for closure of some or all trails leading to the Procter and Gamble property. It could also include re-routing of some of the roads and/or trails in this area.

Implications

Encouraging dispersed and moderately intensive recreation for both motorized and non-motorized users, allowing the construction of suitably placed trails for non-motorized recreation users and granting recreational leases to recreationists for suitable activities will encourage a higher level of use here than in the Interior sub-area. This will assist in discouraging non-allowed resource uses in the Interior.

Providing a buffer between this sub-area and the Procter and Gamble property, and closing some or all trails leading to this property will assist in ensuring vandalism on the property does not occur.

GRAZING RESOURCES

Objectives

1. There is no potential for improved forage production.

2. Native grazing values are so limited as to be insignificant.

Guideline

1. The absence of grazing values will preclude issuing any agricultural dispositions.

Implications

The absence of grazing will have no conflicting influence on any of the other singular or multiple uses.

TIMBER RESOURCES

Objective

1. Forest management should be implemented to maintain a healthy forest. This will reduce the fire hazard and provide a supply of local forest products.

Guidelines

1. Any timber harvesting operation greater than 10 acres in size will be referred to the Fish and Wildlife Division and Natural Areas coordinator for their review.

2. During preparation of the fire management plan, the County of Grande Prairie will consult with the Alberta Forest Service and Natural Areas Coordinator.

MINERAL RESOURCES

Objectives

1. To provide opportunities for industry to define the extent of and develop or produce minerals where reserves have been proven.

2. To provide opportunities for mineral exploration in previously unexplored areas and formations.

Guidelines

Please refer to **ECOLOGICAL** and **FISH AND WILDLIFE RESOURCES.**

Implications

Hand-cutting of geophysical lines, access limitations and well site conditions may result in more difficult and more expensive resource development.

3.6 Resources Road

Features

The Resources Road sub-area is bounded on the west and south by the Resources Road, on the north by the southern boundary of patent land along the Bear River, and on the east by the Interior, Elk Lake and Wapiti River Central sub-areas.

The three primary land features are sand dunes, non-dune plain and shrub/sedge fen. The dunes and non-dune plain occupy approximately 60 percent of the sub-area, and the shrub/sedge fen about 25 percent. The remainder is occupied by treed fen.

As in the three previous sub-areas, the dune/fex complex offers important habitat for ungulates all year-round.

The potential for petroleum and natural gas has not been assessed in this sub-area.

Roads and trails form an extensive network in the dune and non-dune plain areas of this sub-area (Figure 1). They are particularly concentrated in the southern one-third of the sub-area. All forms of highway and off-highway motorized vehicles can be found here. The potential for mishaps between vehicles and non-motorized users, particularly horseback riders, is very high.

Surface leases within this sub-area have been granted for peat extraction in the southwest, grazing by domestic animals in the northwest, and the fairgrounds complex within the northern half. Subsurface leases for petroleum and natural gas are held on all lands within this sub-area. Surface restrictions currently apply on approximately one-half of the sub-area. Two powerlines form the majority of the eastern boundary common to the adjacent Interior and Elk Lake sub-areas.

Access into the planning area occurs via road at both the northwest and southwest corners of this sub-area, the former established for the fairgrounds complex.

The eastern half of this sub-area is under reservation for a Recreation Natural Area (please refer to Section 2.2 for explanation). Surface access may be permitted here, with restrictions, depending upon the suitability of the application. A small portion of the eastern half not included in the above reservation is under another reservation limiting development north and west of the Procter and Gamble property.

Constraints to Activities

The main constraint to activities is the present state of this sub-area owing to the extent and variety of activities and uses occurring there now. The fairgrounds complex, grazing lease, peat extraction site, railway and extensive and well used road and trail network limit the use of the area by ungulates and other wildlife, for example, or by non-motorized recreationists. The latter find it increasingly dangerous to travel the south half of the sub-area because of the potential for mishaps with vehicular traffic. The noise and odours from vehicles also greatly reduce the quality of the outdoor experience for non-motorized users in this sub-area.

The environmentally sensitive sand dunes and wetlands complex is, of course, the primary limiting factor to activities occurring in the portions of this sub-area where some form of development does not appear already.

The eastern half of this sub-area is held under two reservations: the largest parcel is part of a proposed Recreation Natural Area where surface access is permitted, with conditions. The smaller parcel, less than one quarter section in size, lies within the boundary of the reservation currently limiting development north and west of the Procter and Gamble property.

What the Public Wants

This sub-area boundary has been expanded to include two complete sub-areas and a portion of a third illustrated in the December, 1984, Public Review. Using the comments from just the two complete sub-areas, the respondents submitted the following information. The majority of respondents are in favor of dispersed and intensive motorized and non-motorized forms of recreation on both existing and newly created trails. In addition, development of a campground would be acceptable in this area. The majority of

respondents do not feel peat extraction, selective timber extraction, industrial developments, linear developments and sanitary landfill siting are appropriate uses for this sub-area. There is an even split on the appropriateness of petroleum and natural gas exploration and extrction occurring here. Other uses suggested by the public in this review are:

-- industrial development along the western edge of the area
-- sand excavation
-- riding stables
-- archery
-- shooting should not be allowed

Primary Intent

Intensive recreation.

Intensive recreation is currently the practice here and has already resulted in extensive alteration of the natural topographical features.

There is no suitable site for industrial development; very poor grazing for domestic animals is available in this sub-area; public road access to the planning area occurs here. Therefore, the primary intent for this sub-area should be intensive recreation, as this is the most suitable use for this land and is the best place for this category of recreation to occur within the entire planning area.

Activities Considered Suitable

-- All types of recreation, both motorized and non-motorized, dispersed and intensive. New trails, identified through a recreational access plan, can be constructed for all users. Any user group can apply for a recreational lease;
-- Timber management for insect, disease and fire control utilizing a variety of methods;
-- Conditional peat extraction;
-- Conditional petroleum and natural gas exploration and extraction. Access and timing will be subject to approval by appropriate government agencies;
-- Conditional linear developments, such as petroleum and natural gas pipelines, roads, railways, powerlines and fences.

Non-permitted Uses

-- Grazing by domestic animals;
-- Sand extraction;
-- Industrial developments;
-- Subdivision developments;
-- Sanitary landfill siting;
-- Other similar uses.

ECOLOGICAL RESOURCES

Objective

To minimize the environmental impact of developments and activities.

Guideline

Conditions will be placed on developments/uses to minimize soil erosion.

FISH AND WILDLIFE RESOURCES

Objectives

1. a) To maintain or increase fish and wildlife populations and species diversity, including furbearers and furbearing carnivores.

   b) To maintain or enhance fisheries and wildlife habitat, including unique features such as mineral licks, wetlands, etc.

2. To maintain or increase opportunities for utilization (consumptive and non-consumptive) of the fish and wildlife resources, including furbearers and furbearing carnivores.

Guidelines

1. An east/west travel corridor for wildlife will be maintained.

2. Erosion on any site will be controlled to prevent increased silt loads.

3. Fish habitat development (fish pond) could be considered if suitable conditions exist.

Implications

Due to the intensity of activity, or proposed activity, in this sub-area, wildlife utilization is or will be severely reduced. Maintenance of an east/west corridor will ensure the movements of populations and will reduce the impact of activities occurring or proposed.

Provision for facility development here, as well as additional access provided by conditional petroleum and natural gas, may increase all-terrain vehicle activity, increasing disturbance to wildlife and potential for disturbance to sensitive soils.

Long term reduction of grazing in this sub-area will increase the value of the habitat for wildlife by reducing competition for forage, etc.

Fishing opportunity may be increased by the development of fish habitat in this sub-area.

RECREATION AND TOURISM RESOURCES

Objectives

1. To support the establishment of a motorized vehicle use area in this sub-area.

2. Separation of the motorized and the non-motorized user groups would be highly desirable.

3. User groups requiring alternative trails or improvements must file a plan of development to be approved by relevant agencies.

4. Recreational leases will be available to both commercial and non-commercial users for activities considered suitable with the intent of the area.

5. To encourage commercial recreation operations such as a tent and trailer park, campgrounds, horse stables, motorized recreational vehicle use, and concessions (for skiing, snowmobiling, dogsledding, etc.).

Guidelines

1. To allow intensive recreation since it is currently the practice here and has already resulted in extensive alteration of the natural topographical features.

2. All types of recreation, both motorized and non-motorized, dispersed and intensive, may use the area. New trails, identified through a recreational access plan, can be constructed for all users.

3. Any user group can apply for a recreational lease.

4. Planning assistance will be provided by the Alberta government to any commercial operator interested in starting up an operation such as the ones described.

Implications

There is presently a conflict between two types of recreation users in the southern third of this sub-area: the motorized and non-motorized recreationists, particularly horseback riders and trail-bikers. Unless separate entrances to the planning area are used, this conflict can be expected to continue.

There is the potential for a campground north of the fairgrounds in a non-dune plain area. Although blowing sand will be a problem here once some vegetation is removed from the site, this is, nevertheless, the best location within the planning area for this type of facility.

There is presently a problem with vandalism on the one peat lease in this sub-area by some motorized recreationists. This can be expected to continue unless an alternate site can be located for peat extraction. There are other shrub/sedge fens within this sub-area where suitable access might be found, perhaps nearer the fairgrounds.

As the primary intent of this area is intensive recreation, and as there are no suitable parcels of land for industrial development, this latter use should not be permitted in this sub-area. Provision was made in the 1978 plan (see Figure 2 for area covered by plan) to encourage industrial developments on land outside the planning area, west of the Resources Road.

GRAZING RESOURCES

Objective

1. The low soil capability precludes extending the grazing utilization. Range improvement or extension of the present lease is not desirable.

Guidelines

1. Utilization of the present grazing resources must be controlled to prevent any detrimental impact to the soil and vegetation.

2. The present lease will be non-assignable. The lease will be terminated when the lessee stops active use of the lease area.

3. When the present grazing lease is due for renewal, recreation demand will be considered before renewal is granted.

Implication

The present grazing lease does not conflict with the proposed use of this sub-area.

TIMBER RESOURCES

Objective

1. Forest management should be implemented to maintain a healthy forest. This will reduce the fire hazard and provide a supply of local forest products.

Guidelines

1. Any timber harvesting operation greater than 10 acres in size will be referred to the Fish and Wildlife Division and Natural Areas coordinator for their review.

2. During preparation of the fire management plan, the County of Grande Prairie will consult with the Alberta Forest Service and Natural Areas Coordinator.

MINERAL RESOURCES

Objectives

1. To provide opportunities for industry to define the extent of and develop or produce minerals where reserves have been proven.

2. To provide opportunities for mineral exploration in previously unexplored areas and formations.

Guidelines

Please refer to **ECOLOGICAL** and **FISH AND WILDLIFE RESOURCES.**

Implications

Possible restrictions to protect the intensive recreation intent may cause resource development to be more difficult.

3.7 Wapiti River Central

Features

The Wapiti River Central sub-area is located in two areas. The first portion is bounded on the west by the Resources Road sub-area, on the north by the railway and Elk Lake sub-area, on the east by the Procter and Gamble property, and on the south by the Resources Road. The second portion is bounded on the west by the Procter and Gamble property, on the south by the Wapiti River and on the north and east by the railway.

This sub-area consists of fluvial floodplains and terraces, glaciofluvial terraces (partially disturbed through gravel extraction) and steep slopes leading to the Wapiti River.

Portions of these sites are considered valuable to ungulates for winter range and a travel corridor.

This sub-area falls partially within two proven gas reserves. Subsurface leases for petroleum and natural gas are held on all lands within this sub-area. Surface restrictions currently apply only on the portion of the sub-area east of the Procter and Gamble property.

The sub-area is part of a much larger parcel of land under reservation to prevent development from occurring here. Gravel extraction, however, is one of the development exceptions noted on the reservation.

Constraints to Activities

The obvious constraints to activities are the presence of the gravel pit on the eastern portion of this small sub-area and the proximity of both portions to the Procter and Gamble plant, and the railway. These factors make this an unattractive site for non-motorized random recreation, in particular.

The reservation placed on this land for Procter and Gamble presently prevents development from occurring here, other than for communication, power, road and pipeline rights-of-way, and exploration for and removal of oil, gas, gravel and other minerals.

What the Public Wants

The boundary of this sub-area has been changed substantially from the one appearing in the Public Review, December 1984. The size is about the same, but it now excludes all lands north and east of the railway (east of the Procter and Gamble property) and includes land between Resources Road and the railway (west of the Procter and Gamble property). The results of this survey, then, are not valid for this sub-area.

Primary Intent

Industry.

This sub-area is not well suited for random recreation, but it is suited for various types of development associated with industry.

Activities Considered Suitable

-- Organized recreation (if compatible with Procter and Gamble operations);
-- Industrial development (if compatible with Procter and Gamble operations);
-- Natural resource exploration and extraction;
-- Linear development. Examples are petroleum and natural gas pipelines, roads, railways, powerlines, fences;
-- Timber management for insect, disease and fire control, utilizing a variety of methods;
-- Wildlife and fisheries management and management of habitat for all species normally found in this area, on areas not suitable for industrial development.

Non-permitted Uses

-- Random recreation, both motorized and non-motorized.
-- Grazing by domestic animals.
-- Subdivision developments.
-- Sanitary landfill siting.
-- Other similar uses.

FISH AND WILDLIFE RESOURCES

Objectives

1. a) To maintain or increase fish and wildlife populations and species diversity, including furbearers and furbearing carnivores.

   b) To maintain or enhance fisheries and wildlife habitat, including unique features such as mineral licks, wetlands, etc.

2. To maintain or increase opportunities for utilization (consumptive and non-consumptive) of the fish and wildlife resources, including furbearers and furbearing carnivores.

Guidelines

1. An east/west travel corridor for wildlife will be maintained.

2. Erosion on all sites will be controlled to prevent increased silt loads.

Implications

Industrial development here will remove some good ungulate winter range and reduce the travel corridor value of the river valley.

RECREATION AND TOURISM RESOURCES

Objective

Both the eastern and western portions of this sub-area have little recreation value, as the sub-area is intended primarily for industrial use. Random recreation activities here would conflict with industrial development.

Guideline

1. Random recreation will be discouraged.

Implications

The absence of approved random recreation activities will ensure there will be no conflict with development associated with industry. However, according to the document entitled: Public Review, December 1984, the majority of respondents feel dispersed, non-motorized recreation on existing or newly created trails is an acceptable use for the area west of the Procter and Gamble property. Fifty percent of respondents also feel motorized recreation is an acceptable activity in this same area. Appropriate land use planning could ensure this area would be useable as a recreation area similar to the Elk Lake sub-area.

GRAZING RESOURCES

Objective

This sub-area has no value for improved or unimproved grazing for domestic animals.

Guideline

1. The absence of grazing values will preclude issuing any agricultural dispositions.

Implications

The absence of grazing will have no conflicting influence on the proposed industrial use.

TIMBER RESOURCES

Objective

1. Forest management should be implemented to maintain a healthy forest. This will reduce the fire hazard and provide a supply of local forest products.

Guidelines

1. Any timber harvesting operation greater than 10 acres in size will be referred to the Fish and Wildlife Division and Natural Areas coordinator for their review.

2. During preparation of the fire management plan the County of Grande Prairie will consult with the Alberta Forest Service and Natural Areas Coordinator.

WATERSHED RESOURCES (eastern portion only)

Objectives

1. To minimize soil erosion occurring from industrial development, natural resource exploration and extraction, linear development and timber management.

2. To ensure appropriate reclamation methods are used following termination of all surface disturbances.

Guidelines

1. Existing operating restrictions on resource management activities will be implemented to protect watershed quality.

2. Additional operating restrictions will be applied on sensitive areas, if necessary.

MINERAL RESOURCES

Objectives

1. To provide opportunities for industry to define the extent of and develop or produce minerals where reserves have been proven.

2. To provide opportunities for mineral exploration in previously unexplored areas and formations.

Guideline

1. Petroleum and natural gas activity in the western portion should be conducted so as to be compatible with recreation values of the surrounding area (Elk Lake and Resources Road sub-areas).

4. PLAN MANAGEMENT

General administrative procedures and mechanisms required for plan management, monitoring and amendment are outlined in this section. The next public document will be a summary of the plan's first year of implementation progress. (See below.) Both the recreational management plan and the fire management plan will be completed by this time as well.

4.1 General Administration

The Bear River-Wapiti Local Integrated Resource Plan will be made operative within the terms of appropriate legislation and regular government programs. The sub-areas provide a framework for processing applications on new public land dispositions within the planning area. Existing systems for referral and interdepartmental review will apply to the plan. Resources will continue to be administered by the departments responsible, in line with the provisions of the plan, including resource management guidelines and any subsequent operational plans.

Participating government management agencies will have several responsibilities to ensure the effective delivery of this plan. It will be their responsibility to deal with any conflicts or concerns with respect to implementation or interpretation of any of the plan's provisions. The responsibilities are outlined by subject area below.

Referral Systems

Participating government management agencies will ensure existing referral systems of the Alberta government are adequate to encompass all affected or concerned agencies.

Plan Monitoring

The Bear River-Wapiti Local Integrated Resource Plan will be reviewed annually by the Peace River Regional Resource Management Committee to:

-- assess the relevancy of the stated resource objectives in light of changing conditions;

-- assess the resource management guidelines and referral procedures;

-- assess agency operational plans to ensure their consistency with the resource management area intents, objectives and guidelines; and

-- recommend amendments to the Integrated Resource Plan and future actions required to maintain or promote government resource management activities in the planning area.

An annual report will document changes in the plan. The report will also highlight the previous year's activity in the planning area, including the number, type and location of referrals and what conflicts or concerns were addressed and resolved. The report will also indicate what might be expected to be accomplished in the planning area during the next year. The report may be deferred if it is not needed because of a lack of activity or progress on government resource management objectives within the planning area.

A major plan review by the Peace River Regional Resource Management Committee will occur at five-year intervals to facilitate:

-- a comprehensive assessment of all aspects of the plan, including but not limited to, broad resource management objectives, and sub-area boundaries and intents;

-- a public review on the same basis as in the development of new integrated resource plans; and

-- a statement recommending amendments to the plan and future actions required to maintain or promote government resource management activities in the planning area.

A report will document all amendments. Major plan reviews may be undertaken more or less frequently than every five years if major resource policy commitments or developments of program initiatives require them.

Amendment Procedures

Changes to the planning area boundary, broad planning area resource management objectives, and the sub-area boundaries and intents

will require major amendment to the plan. An amendment to the plan may be required as a result of an annual review, major five-year review, government request, or a request from an individual, group or organization outside the government. Proposed amendments to the plan from outside the government should be made by formal application to the Assistant Deputy Minister of the Resource Evaluation and Planning Division, Alberta Forestry, Lands and Wildlife. Opportunities for public review of proposed amendments to the plan will be provided before changes are approved by the government. Amendments which entail a major policy decision or a change to the basic intent of the plan may be forwarded by the Minister of Forestry, Lands and Wildlife to the appropriate Cabinet Committee for approval.